

# ALBA 755, 855

Six valve, plus two rectifiers and tuning indicator, four wave-band superhet with 8 push-buttons utilising a mechanical system. In table (855) and radiogram (755) models and for 190-260 v. 40-100 cycle supplies. Made by A. J. Balcombe & Co., Ltd., 52-58, Tabernacle St., London, E.C.2.

**Circuit.**—Transformers couple the aerial to V1, the frequency-changer, on each of the four bands, there being a common primary for both M. & L.W. The oscillator section is straightforward with anode reaction coils on each band, and fixed padders on the two S.W. ranges. Trimmer-tuned iron-core transformers link V1 to V2, the I.F. amplifier, and V2 to V3, a

double-diode triode. A.V.C. elements are conventional, control being applied to V1 on M. and L.W. only.

Output of the signal demodulation diode is taken via a P.U. switch to the volume control, R15. The triode section resistance-capacity feeds V4, an L.F. amplifier.

V4 has load resistors, R18 and R21, in both anode and cathode circuits and these develop opposite-phase signals which operate V5 and V6, the push-pull output pentodes, via C19 and C20. R20 biases V4.

R29 and R30 are grid leaks and R22 and R23 are oscillation stoppers. V5 and V6 energise a push-pull output transformer.

H.T. is obtained from a full-wave rectifier system which is perfectly normal, although a full-wave rectifier with strapped anodes is used for each half-wave (V7 and V8).

V9 is a "magic eye" tuning indicator operated from the A.V.C. line.

## GANGING

**I.F. CIRCUITS.**—Inject 470 kc. to V1 grid and adjust I.F. trimmers for maximum, repeatedly reducing the input to keep below the level at which the A.V.C. begins to function.

**M.W. BAND.**—Tune to 250 m., inject this wavelength to aerial and adjust T1 and T2 for maximum.

Tune to 500 m., inject this wavelength and, rocking gang slightly, adjust T3.

**L.W. BAND.**—Tune to, and inject, 1,300 m. Adjust T4 and T5. Pad with T6 at 1,900 m.

**S.W.1 BAND.**—Tune to, and inject, 25 m. Adjust T7 and T8. Padding is fixed.

**S.W.2 BAND.**—Tune to, and inject, 50 m. Adjust T9 and T10. Padding is fixed.

## WINDINGS

L	Ohms.	L	Ohms.
1	.. 40	9	.. 4
2	.. 15	10	.. 4
3	.. 15	11	.. 4
4	.. 30	12	.. 4
5	.. 50	13	.. 300
6	.. 3	14	.. 250
7	.. 9	15	.. 14
8	.. 15	16	.. 700

## CONDENSERS

C	Mfds.	C	Mfds.
1	.. 5 mmfds.	15	.. .005
2	.. .1	16	.. .25
3	.. 25 mmfds.	17	.. .004
4	.. .1	18	.. .01
5	.. .1	19	.. .01
6	.. .0001	20	.. .01
7	.. .0002	21	.. 16+16+8
8	.. .1	22	.. .05
9	.. 75 mmfds.	23	.. .01
10	.. .1	24	.. .01
11	.. .1	25	.. .01
12	.. .1	26	.. .0036
13	.. .0001	27	.. 600 mmfds.
14	.. .0001	28	.. 300 mmfds.

## VALVE READINGS

V	Type	Electrode	Volts	Ma.
1	ECH3	Anode	240	3.4
		Screen	90	3
		Osc. anode	90	5
2	EF9	Anode	246	3.5
		Screen	80	1.7
3	EBC3	Anode	150	2.4
4	EBC3	Anode	190	.4

Continued in end column

Although a large set of circuits of the 855 forward. The current output with phase in the use of two rectifier valve is the electron

Switching provides f and a pick-up po switch bank is utilis oscillator coils to effect

